

# **Defining the Community: Lessons from Applied CBPR in Urban Atlanta**

National Institute of Child Health and Human  
Development (NICHD) - November 2, 2007

**Marshall Kreuter, PhD**

**Yanique Redwood, MPH**

**Catherine Prather, CHW**

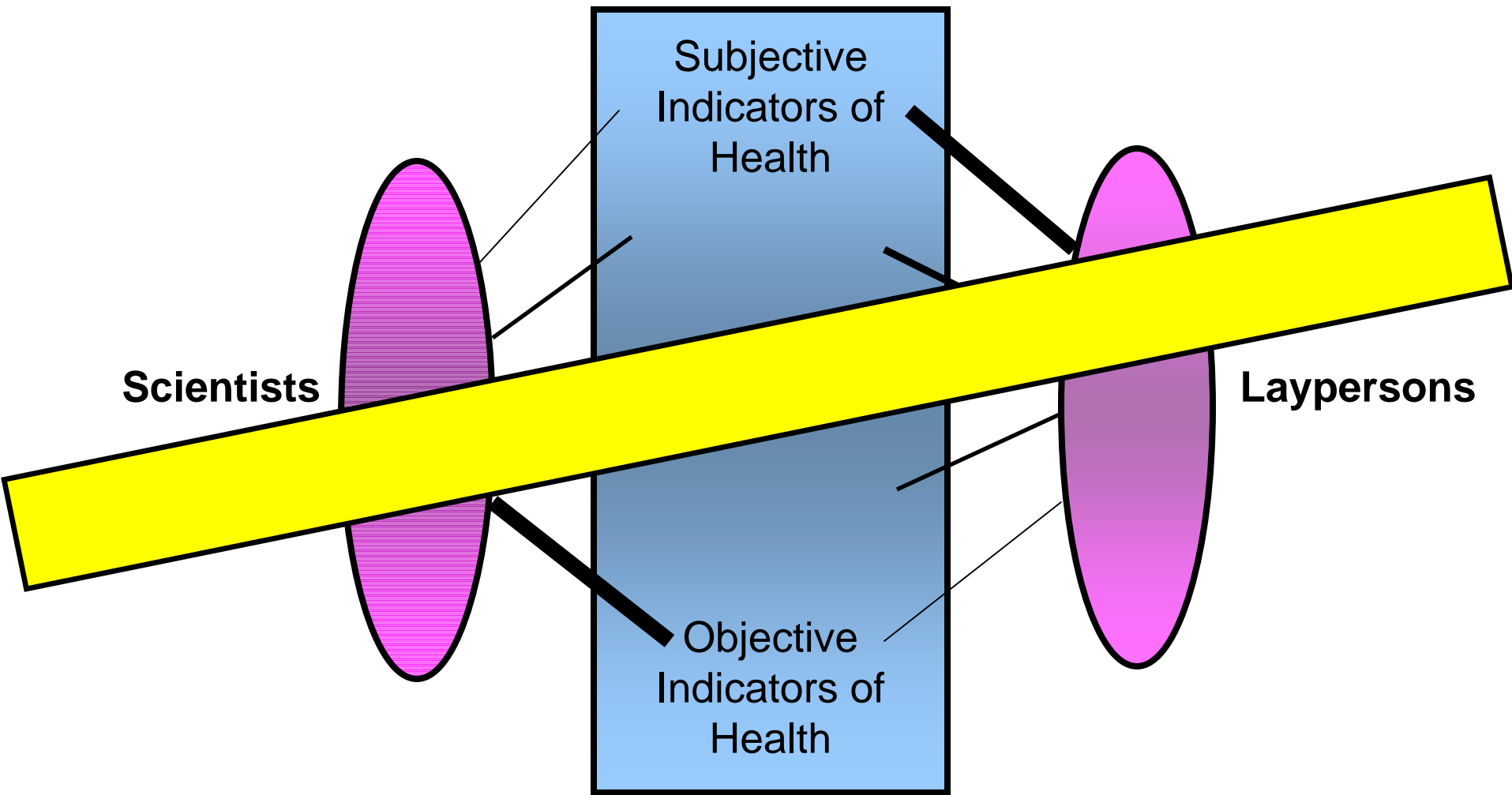
**Roddy Longino, CHW**

*Institute of Public Health • Georgia State University*

# Key Points

- Decisions about public health have traditionally been driven by the opinions of, and the data gathered by, scientists.
- How CBPR methods we are applying attempt to add the views of community stakeholders to that decision process.
- Implications of that strategy.

# Seeing Health Problems Through Different Lenses\*



\*Green & Kreuter, *Health Program Planning: An Educational and Ecological Approach*, 4th ed., McGraw-Hill, 2005.

# Gaps Between People's Perception of Needs, Scientific Data, and Policy and Resource Allocation

The diagram consists of three circles arranged in a triangular pattern. The top-left circle is blue and contains the text 'Public's Needs and Priorities (Laypersons)'. The top-right circle is green and contains the text '“Actual Needs” (Scientists)'. The bottom circle is red and contains the text 'Resources, feasibilities, policy (Policy-makers)'. The circles are empty, representing gaps or differences between these perspectives.

**Public's Needs  
and Priorities**  
*(Laypersons)*

**“Actual Needs”**  
*(Scientists)*

**Resources,  
feasibilities, policy**  
*(Policy-makers)*

# Can We Close the Gaps through Community-based Participatory Research (CBPR)?

Public's  
Perceived Needs  
& Priorities

“Actual needs”

Participatory Research



Health Education &

Health Literacy

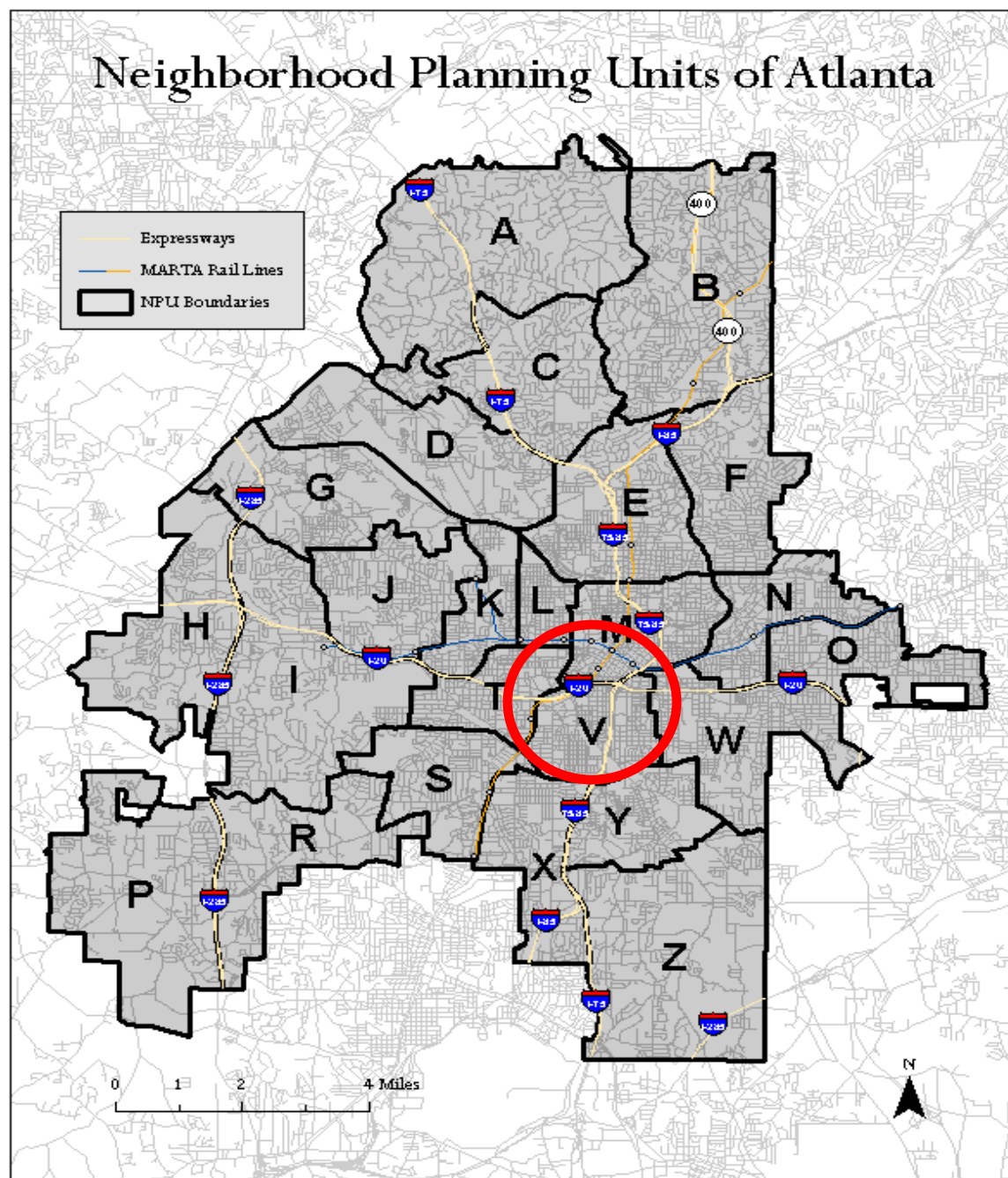
***A = an increase in collaborative, common ground***

Resources,  
feasibilities,  
policy

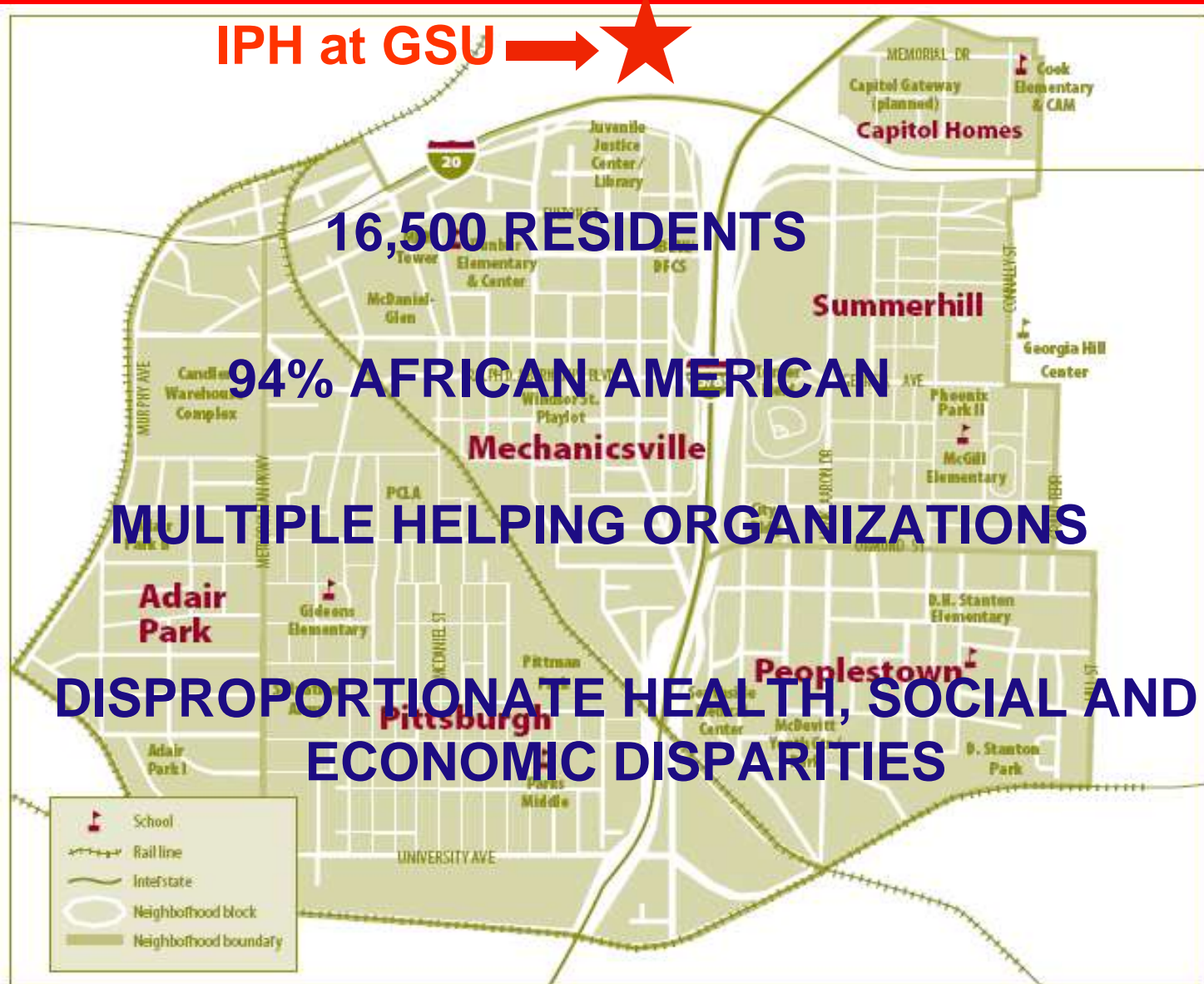
Community mobilization,  
media advocacy &  
organizational  
development



# Neighborhood Planning Units of Atlanta

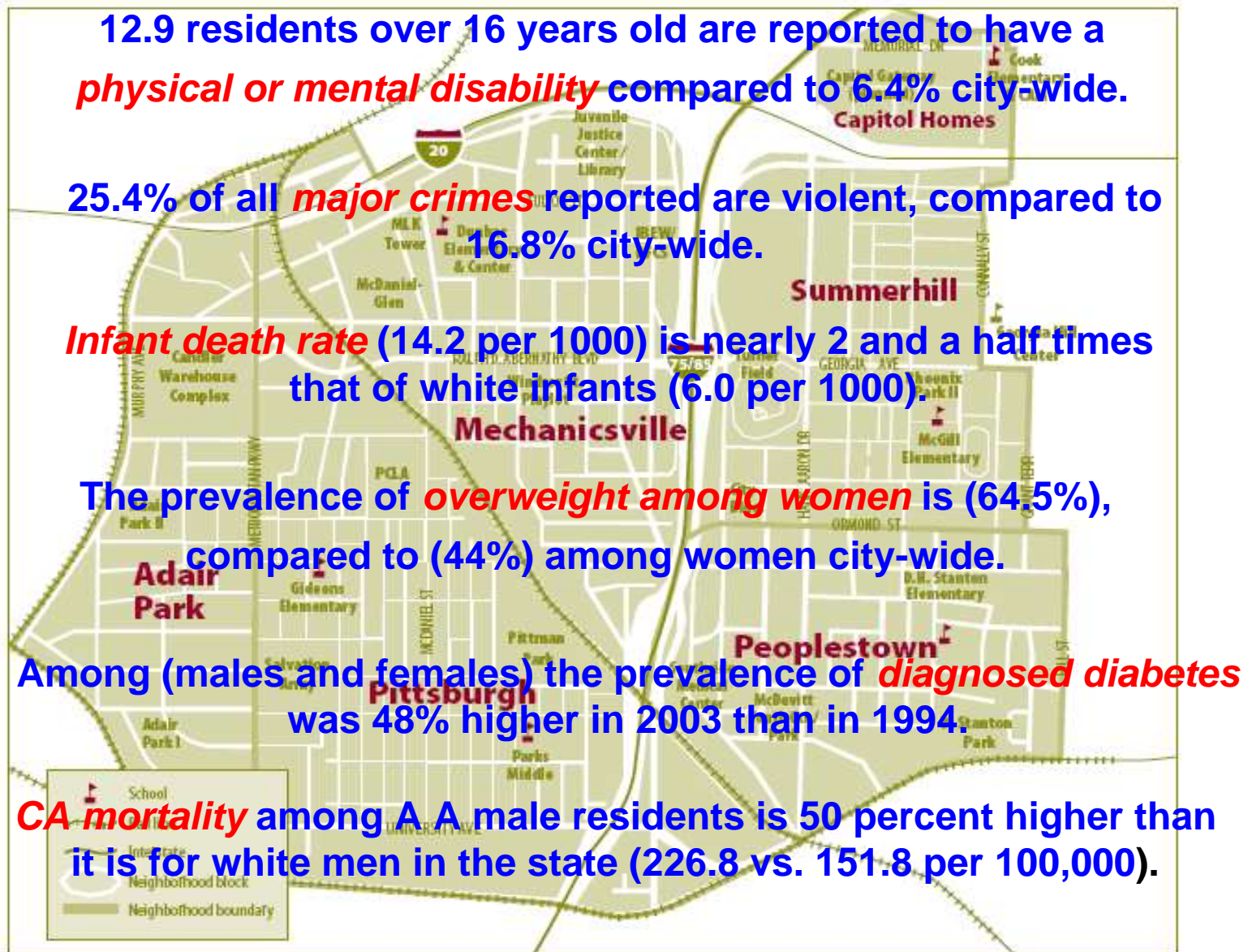


# Neighborhood Planning Unit V (NPU-V)



# NPU-V: Indicators of Health Disparities

(Neighborhoods' Count Data – Annie E. Casey Foundation)



# Documentation of Health Problems and Relevant Determinants (Year1)

## Existing Data

- *NPU-V Neighborhoods Count (NDAG w/ Annie E. Casey support)*
- GIS health status maps
- Southside Medical Records review ✨
- Analysis of commercial decline

## NPU-V Specific Data Collected

- “Photovoice” (Resident perceptions of assets/salient problems)
- Perception Analyzer (PA) (Community group “listening sessions” within the five neighborhoods of NPU-V)\*
- Moment to Moment PA – (Group response to resident perceptions)
- Ethnographic interviews (Content for social capital assessment)

# Top 10 Diagnoses at Southside Medical Center by Residence and Gender (2004-2005 Records Review)

NPU-V Males	NPU-V Females	Other Males	Other Females
1. Hypertension	1. Hypertension	1. Hypertension	1. Hypertension
2. Acute URI	2. Diabetes	2. Eye disorders	2. Eye disorders
3. Diabetes	3. Inflammation of cervix/vagina	3. Teeth disorders	3. Diabetes
4. Eye disorders	4. Eye disorders	4. Diabetes	4. Teeth disorders
5. Teeth disorders	5. Menstruation problems	5. Skin-rash,edema	5. Inflam. of cervix/vagina
6. Asthma	6. Teeth disorders	6. Asthma	6. Acute URI
7. Skin-rash/edema	7. Dermatophytosis	7. Dermatophytosis	7. Menstruation problems
8. Dermatophytosis	8. Skin-rash, edema	8. Otitis media	8. Unspec disorders of joints
9. Atopic dermatitis	9. Atopic dermatitis	9. Conjunctiva	9. Dermatophytosis
10. Conjunctiva	10. Asthma	10. Lipid metab.	10. Visual disturbances

# Perception Analyzers: Technological Alternative to Focus Groups Research

Wireless/hand held easy to use

- Quantitative precision
- Reduces the “*Alpha effect*”
- All respondents have an equal voice
- Response data are instantly available
- **PROMPTS “WHY” QUESTIONS**



# Facilitating “Listening Sessions”

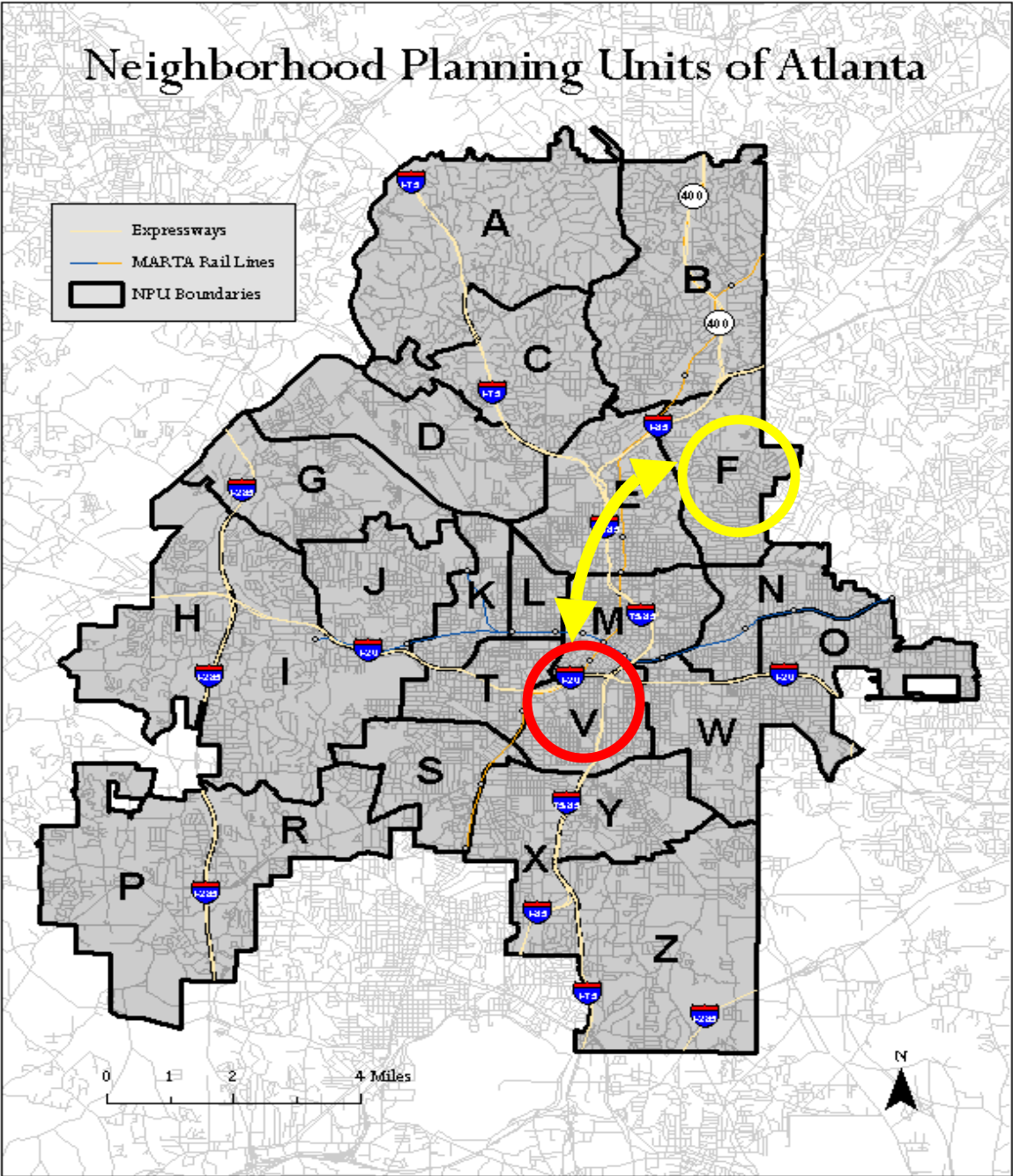


# Listen Sessions: Resident Participation



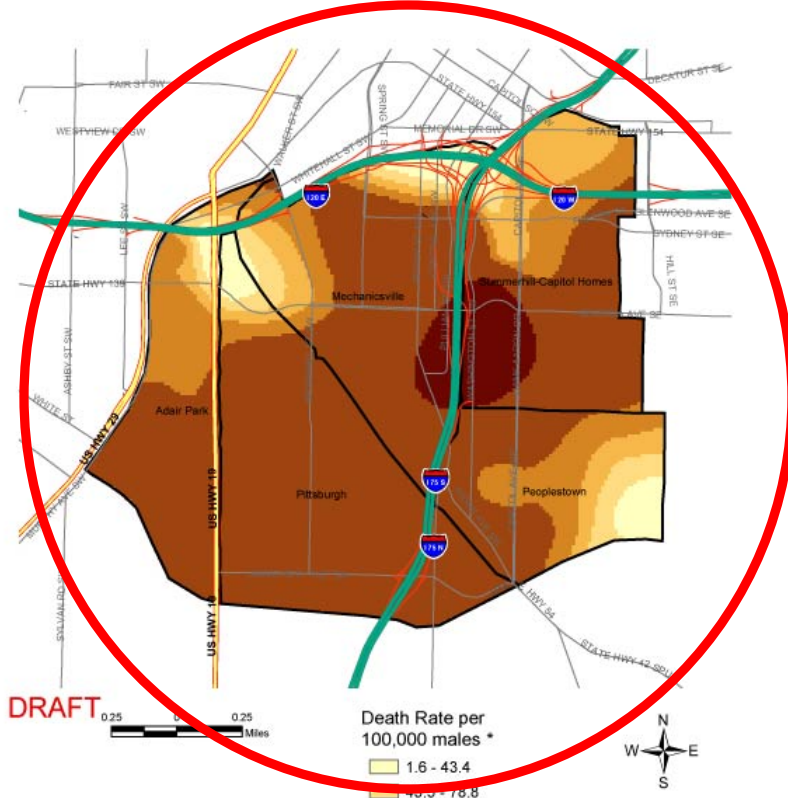
### Neighborhood Planning Units of Atlanta

The map displays the 26 Neighborhood Planning Units (NPUs) of Atlanta, labeled A through Z. A legend in the top left corner identifies the symbols: orange lines for Expressways, blue lines for MARTA Rail Lines, and black outlines for NPUI Boundaries. A yellow circle highlights NPU F in the northeast, and a red circle highlights NPU V in the center. A yellow arrow points from NPU F to NPU V. The map also shows major expressways (Interstates 75, 20, 28, 405, 85, 94) and MARTA Rail Lines. A scale bar at the bottom left indicates distances from 0 to 4 miles, and a north arrow is located at the bottom right.

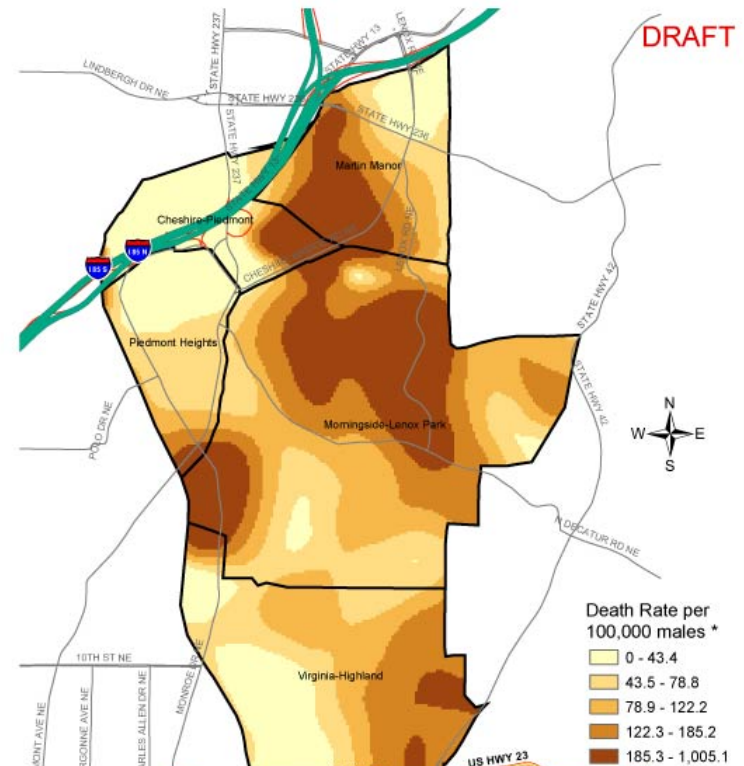


# All Cancer Deaths - Males 1998 – 2002

NPU-V



NPU-F (Morningside Area)



**The darker the shade, the higher rate of cancer.**



Georgia Department of Human Resources  
Division of Public Health  
Office of Health Information & Policy

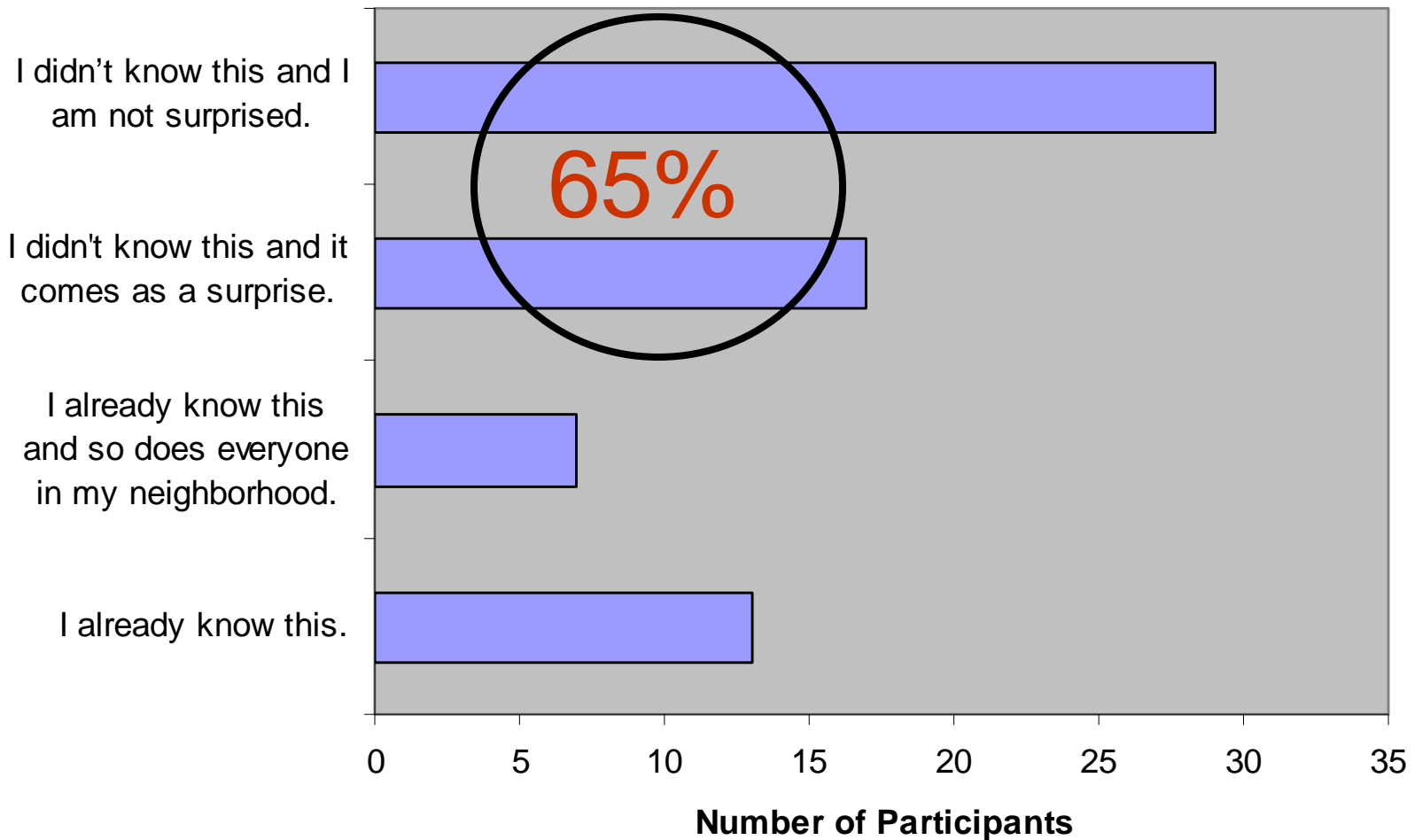
Created: February 2006  
Source: Division of Public Health  
Projection: Georgia Statewide  
Lambert Conformal Conic  
\* Manual Classification



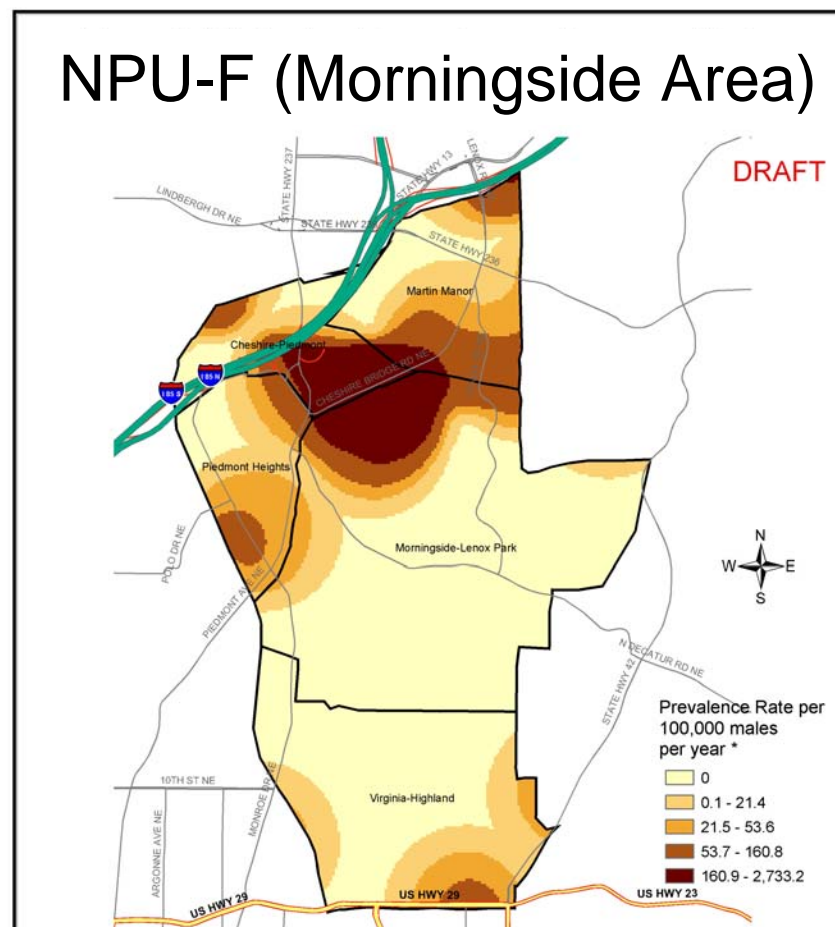
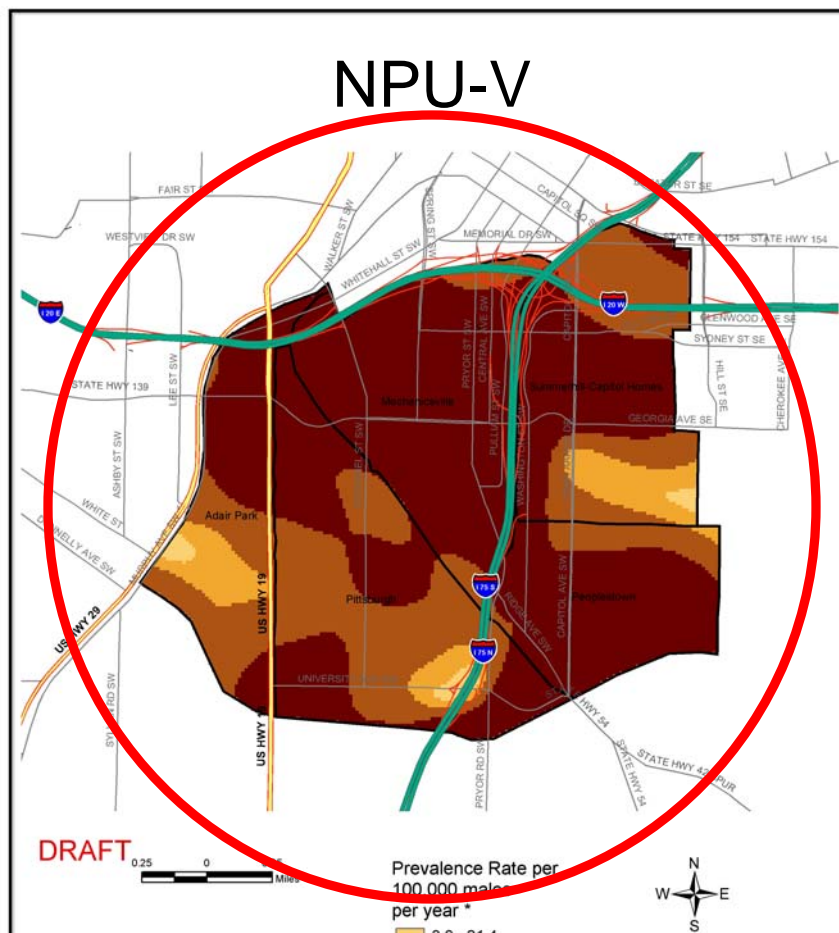
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Created: February 2006  
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Projection: Georgia Statewide  
Lambert Conformal Conic  
\* Quantile Classification

## Responses to the Comparison of Maps with Rates of Cancer Mortality (Deaths) of Men in NPU-V & NPU-F



# Type II Diabetes Prevalence - **Males** 2002 - 2004

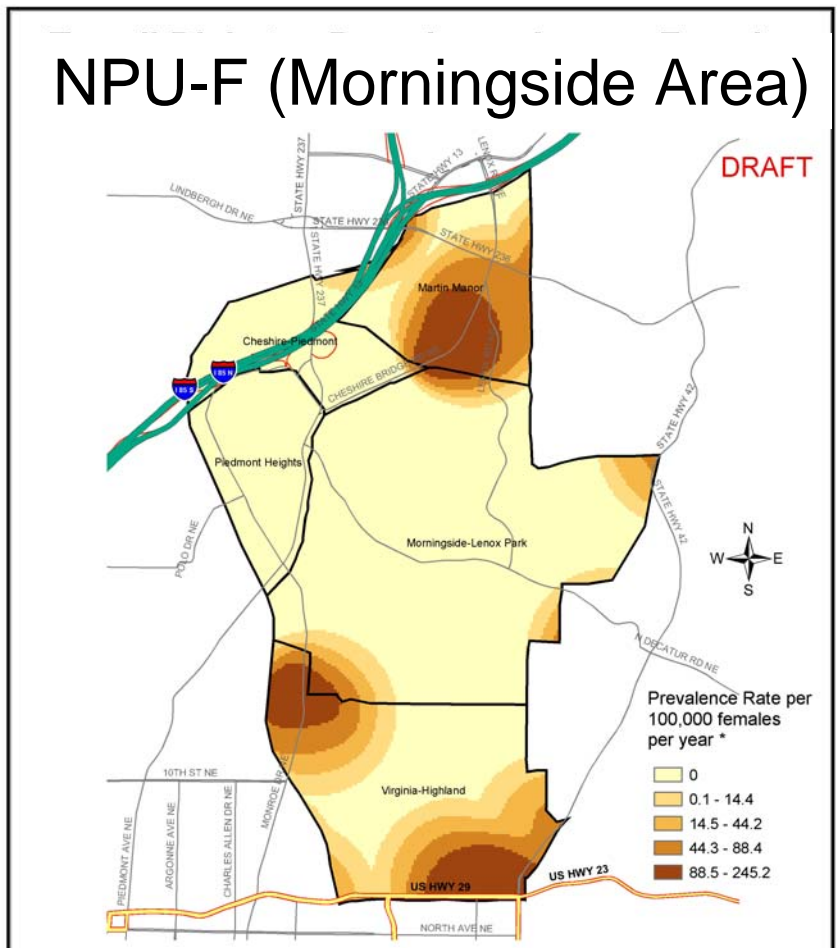
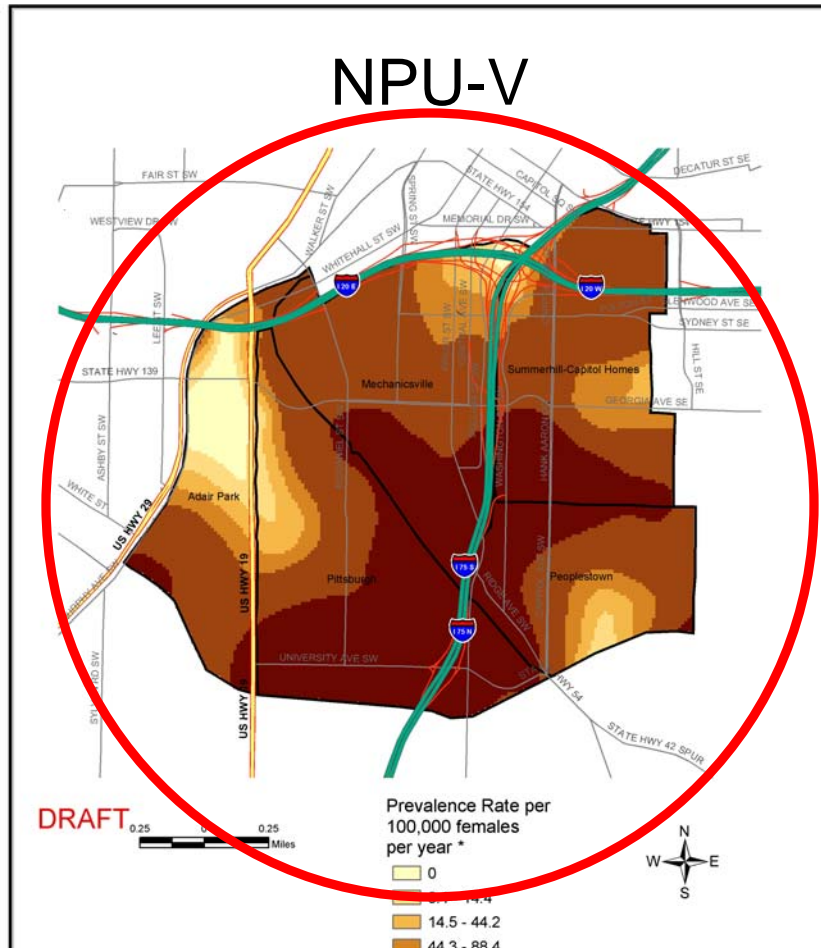


**The darker the shade, the higher rate of Type II diabetes.**



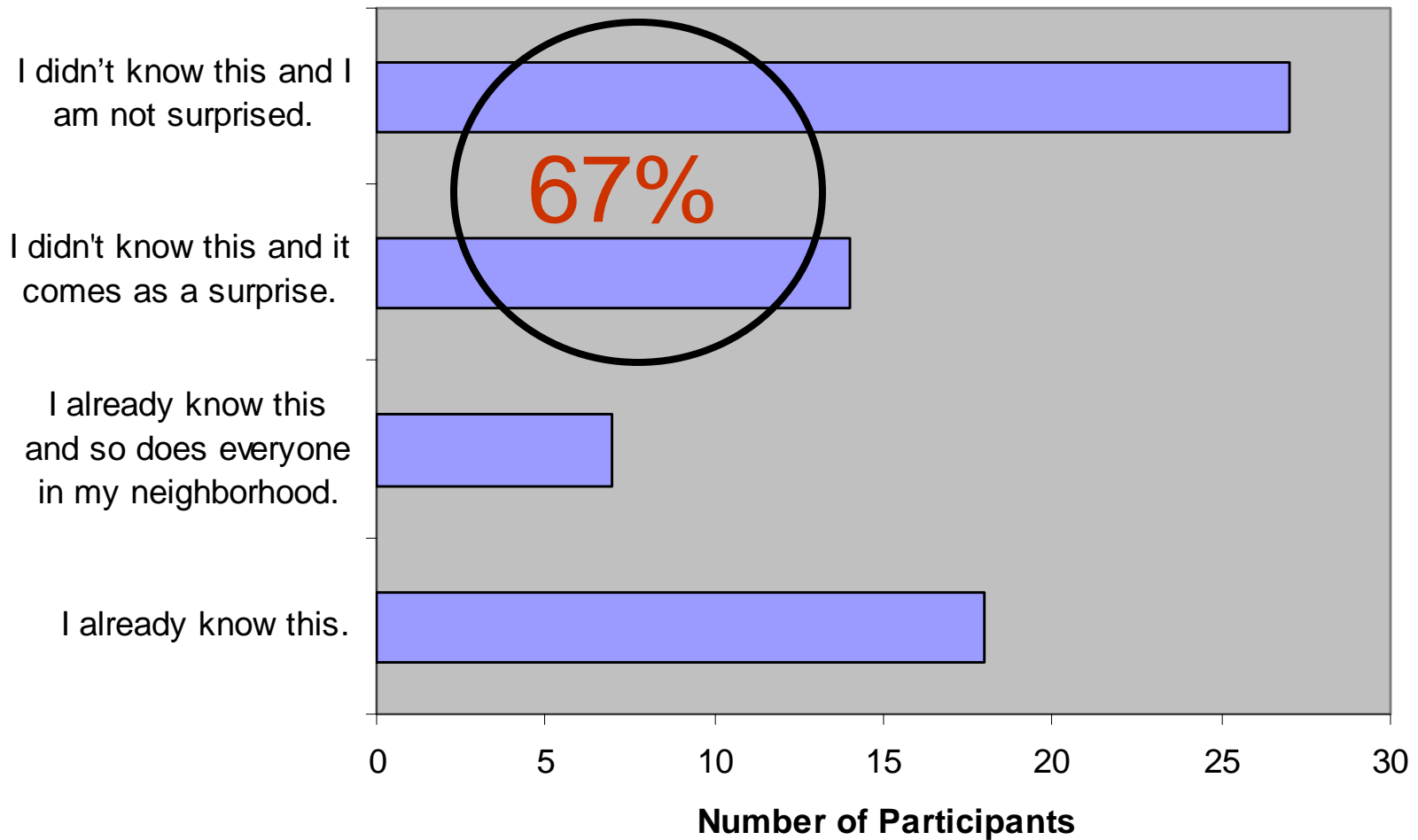
# Type II Diabetes Prevalence - **Females**

## 2002 - 2004



**The darker the shade, the higher rate of Type II diabetes.**

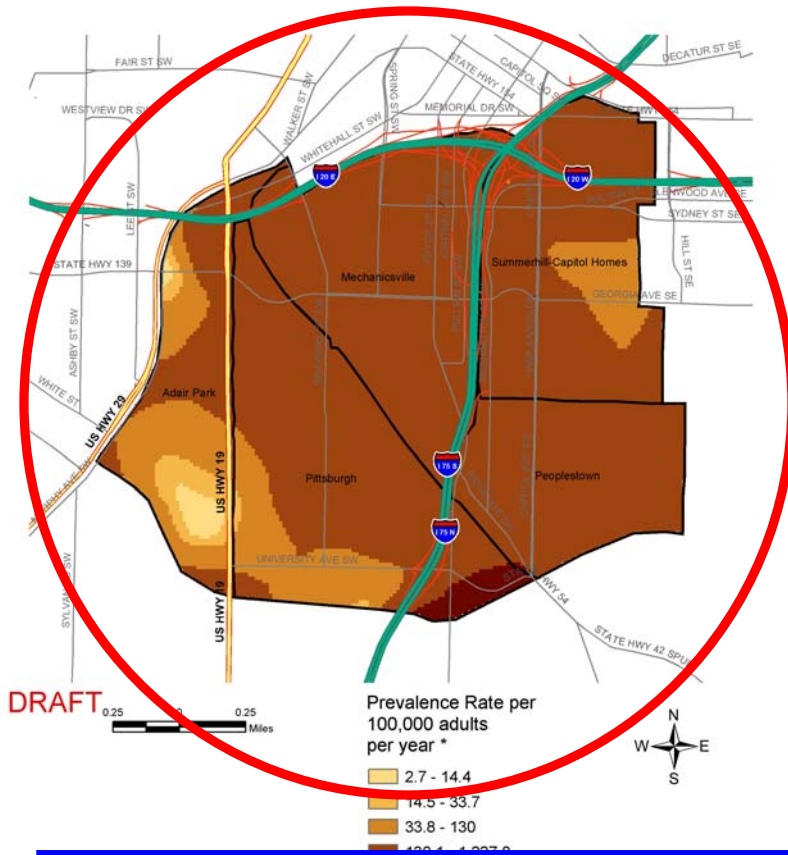
## Responses to the Comparison of Maps of Type II Diabetes Rates for Men and Women in NPU-V & NPU-F



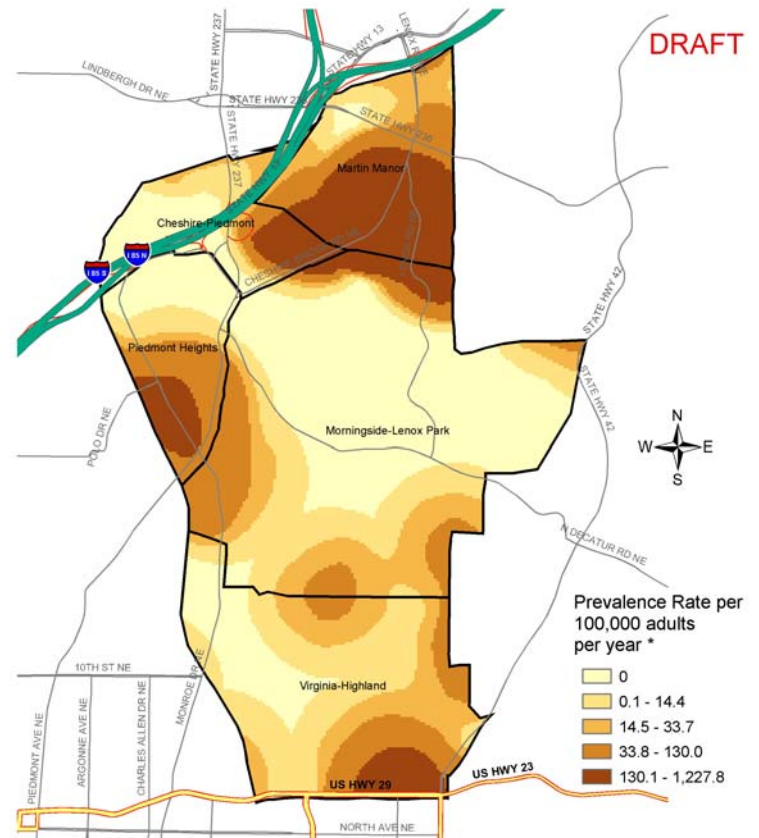
# Asthma Prevalence - Adults

## 2002 – 2004

NPU-V

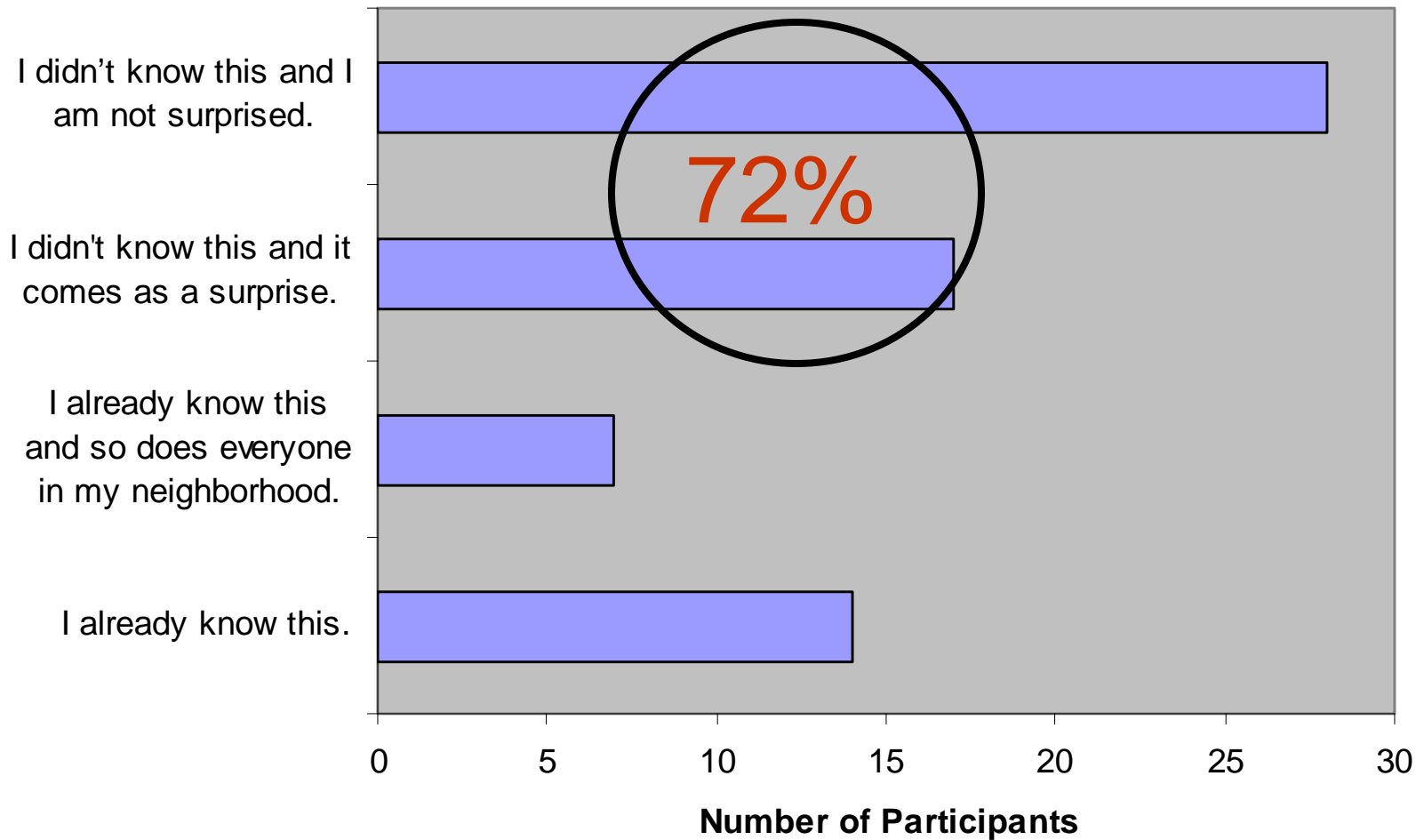


NPU-F (Morningside Area)



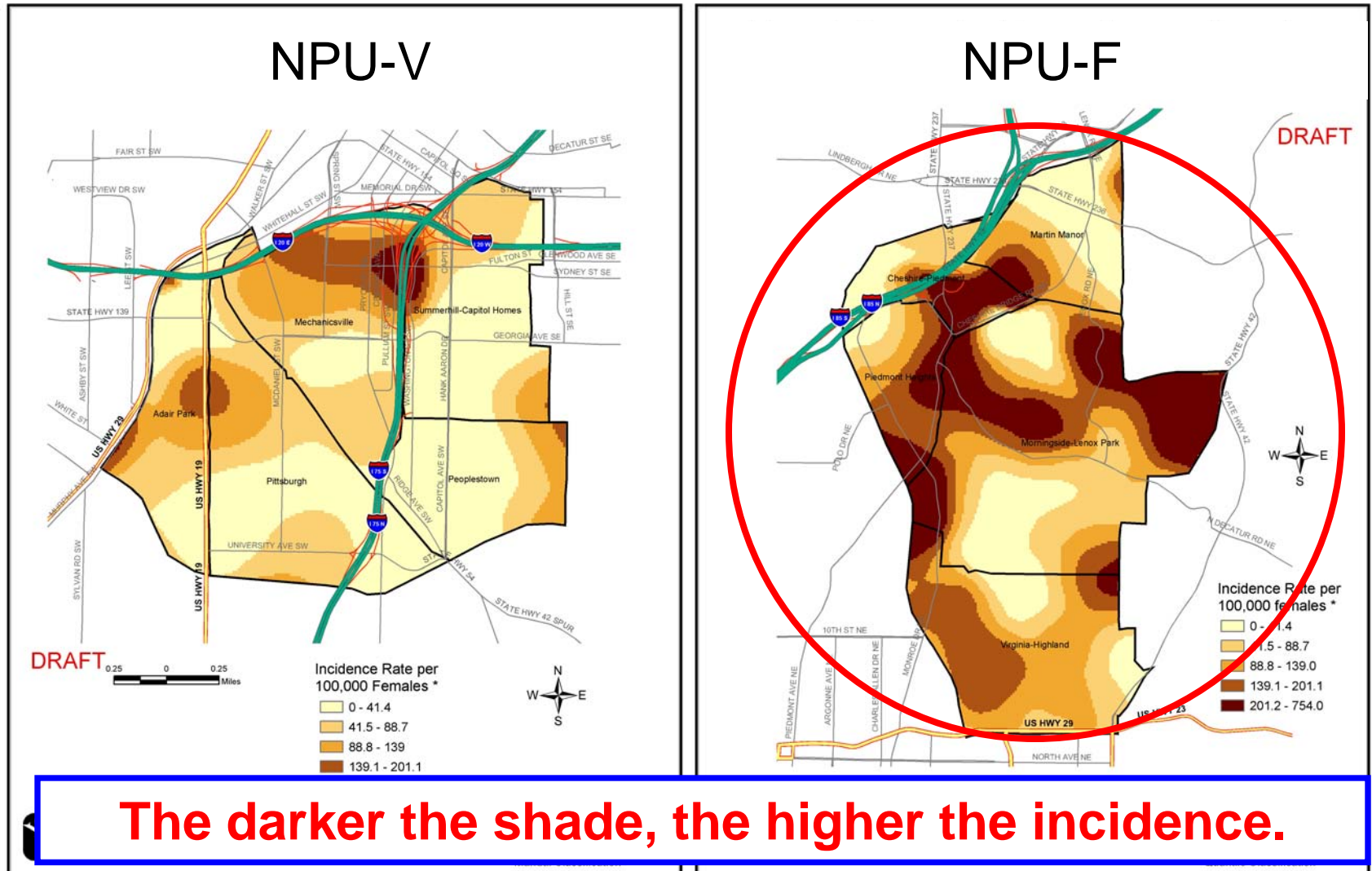
**The darker the shade, the higher rate of asthma.**

## Responses to the Comparison of Maps of Rates of Asthma for Adults in NPU-V & NPU-F

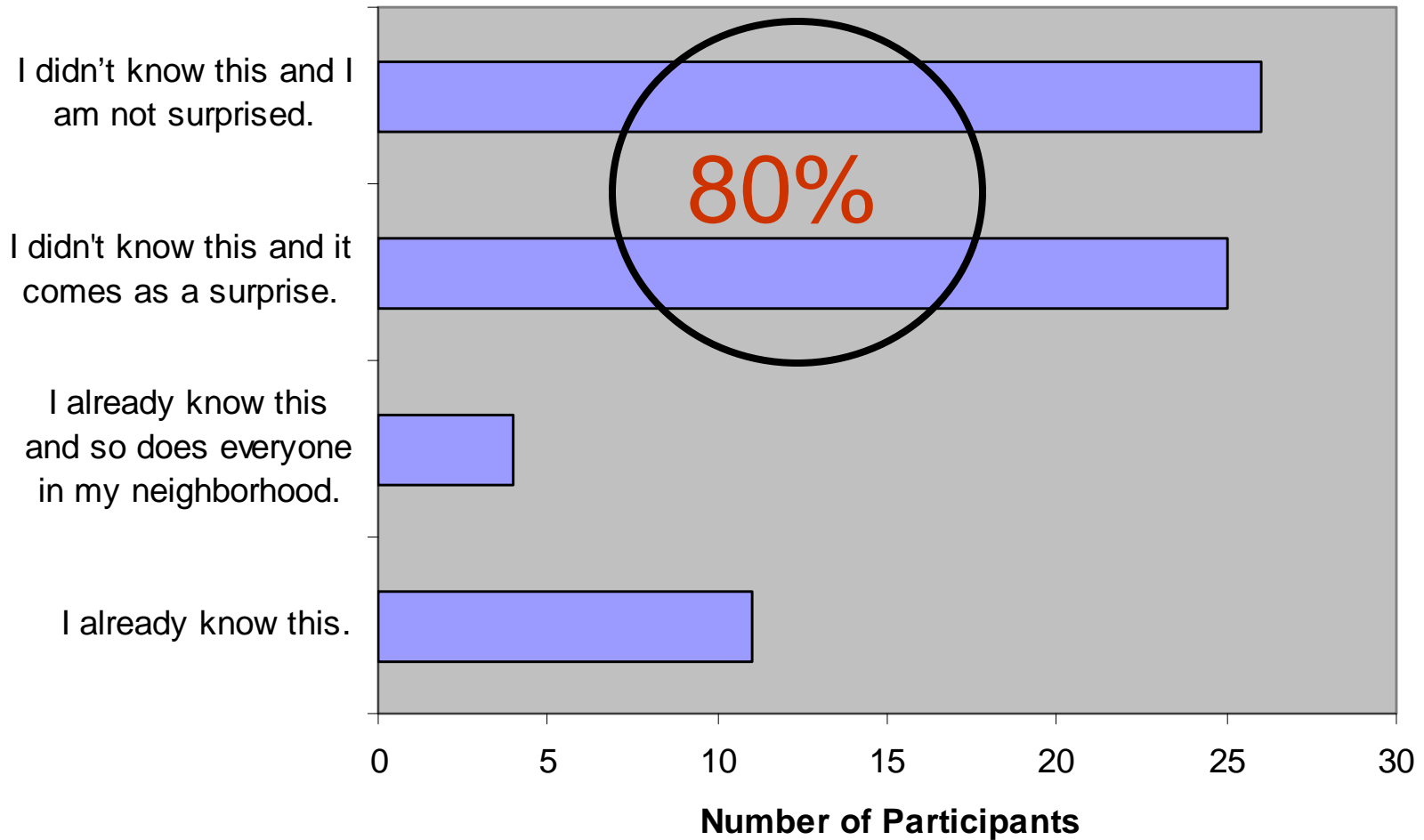


# Breast Cancer **Incidence** - Females

## 1999 – 2002



## Responses to the Comparison of Maps of Breast Cancer Incidence Rates in NPU-V & NPU-F

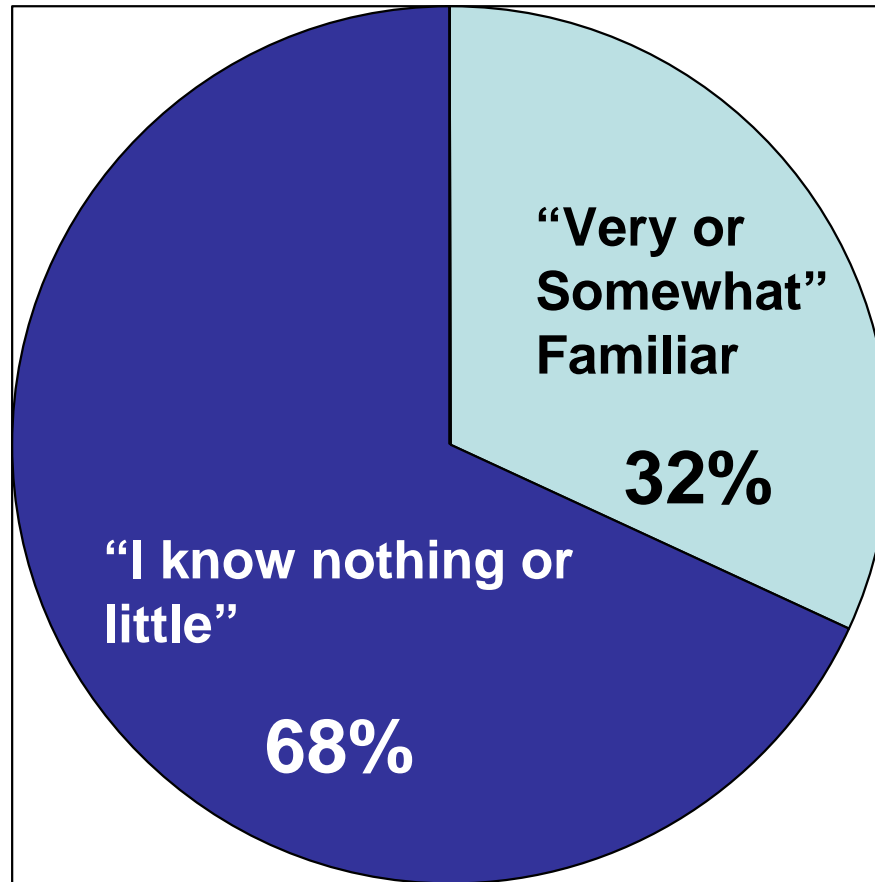


# Cancer mortality among all age females in Atlanta Neighborhood Planning Units V and F (1999-2002)

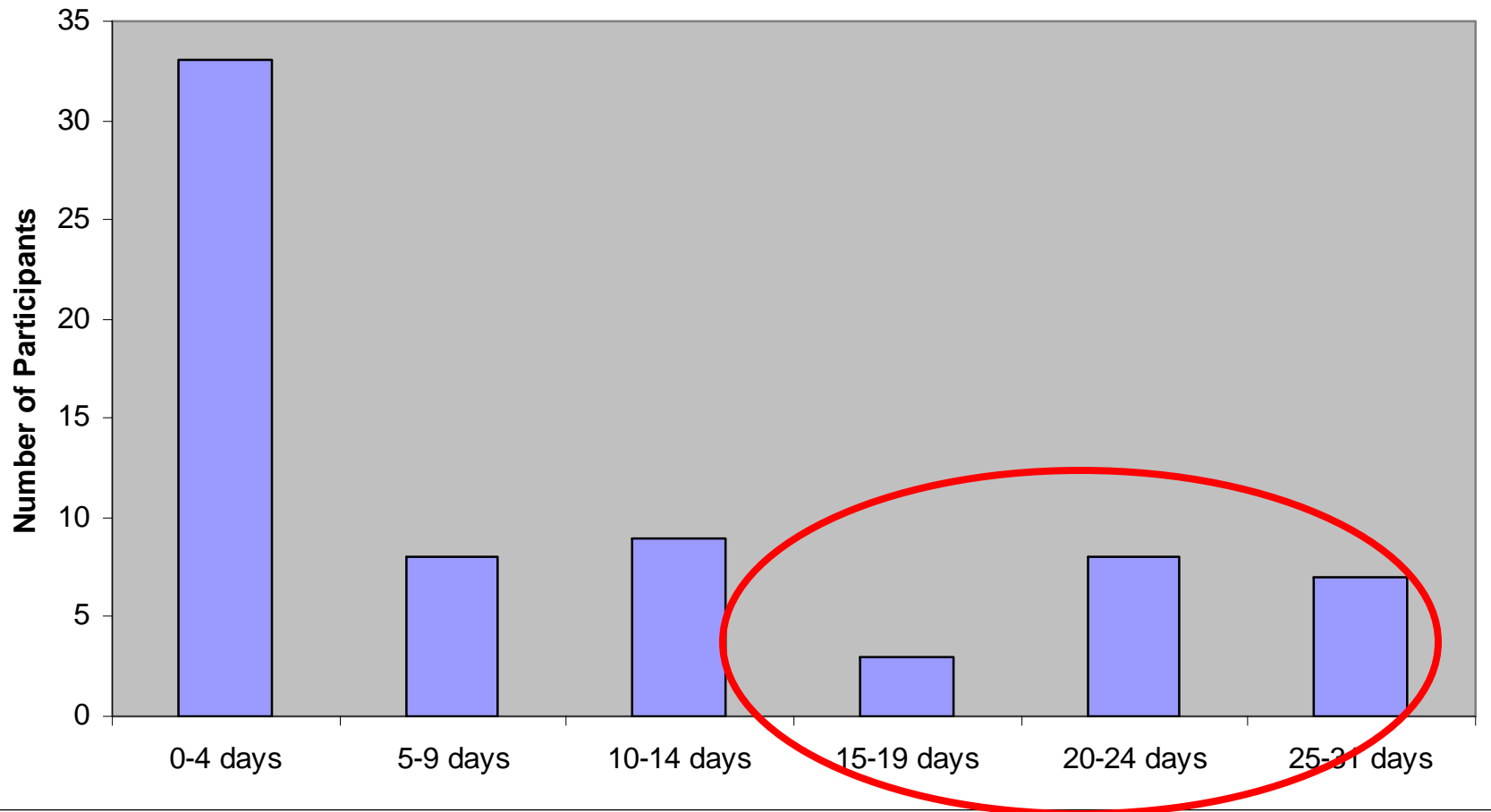
Race	Measure	NPU-V	NPU-F
All races	Number of deaths	17	10
	Sum of females over 4 year period	33,988	38,416
	Death rate per 100,000 females	50.0	26.0

# How much do you know about this agency?

*(Southside Medical, CBWW, CWF, REACH, FCDHW?)*

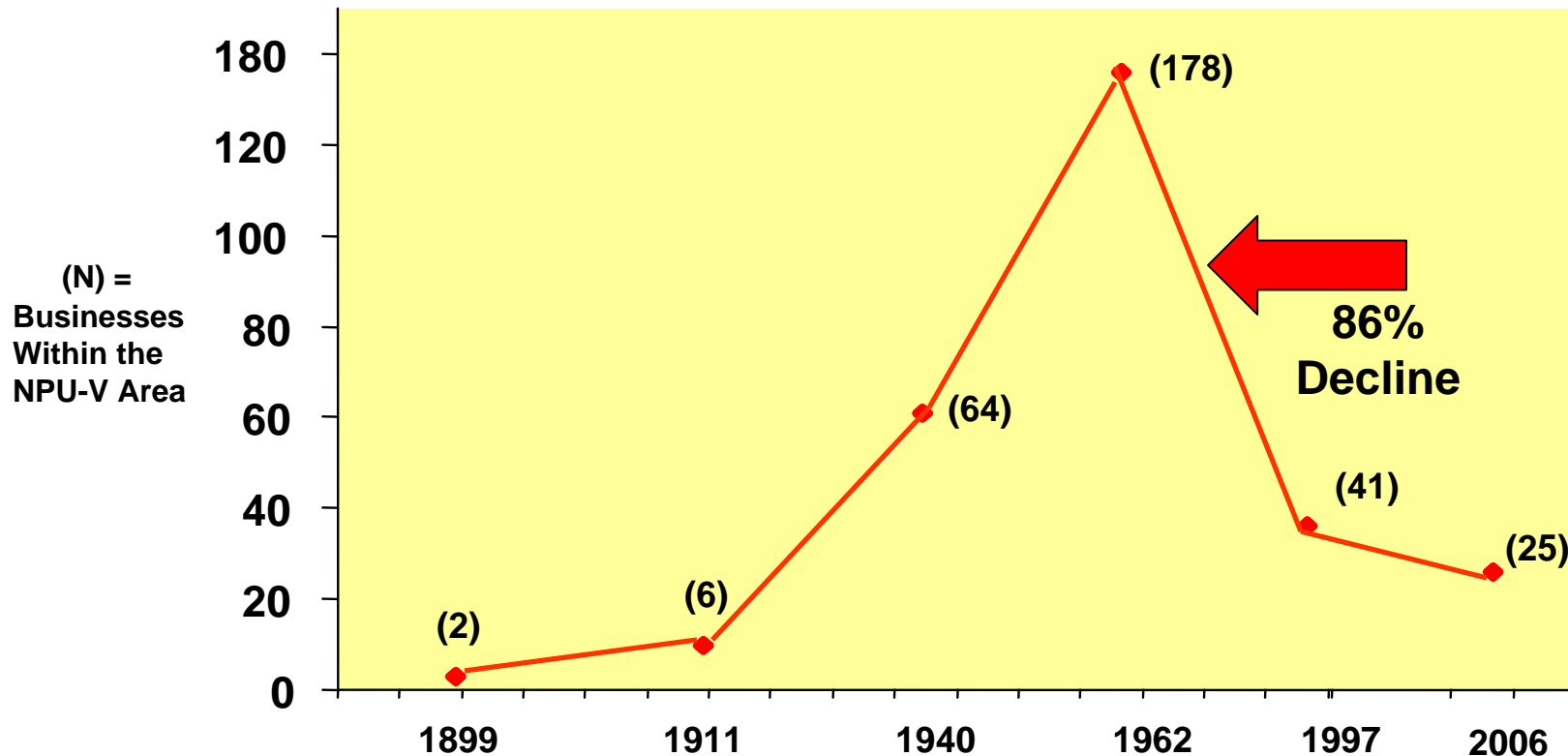


## Number of Days When Mental Health was Not Good



**Mental health “not good” 14 or more days . . . 26%- Frequent Mental Distress – (FMD) 2003 = 12%**

# Historical Trend: Decline in Businesses Within NPU-V (1889 – 2006)



*Kenan Research Center, Atlanta, GA and Jennifer Boehm, GSU - 2006*

# Photovoice

“Photovoice blends a grassroots approach to photography and social action. It provides cameras not to health specialists, policy makers, or professionals, but to people with least access to those who make decisions affecting their lives.” (Wang, 2005)

# Trash: Construction Debris Building Up or Tearing Down?



# Photovoice: Documenting Resident Perceptions



# Photovoice Narrative: “A Mess” by Tagslie Leslie

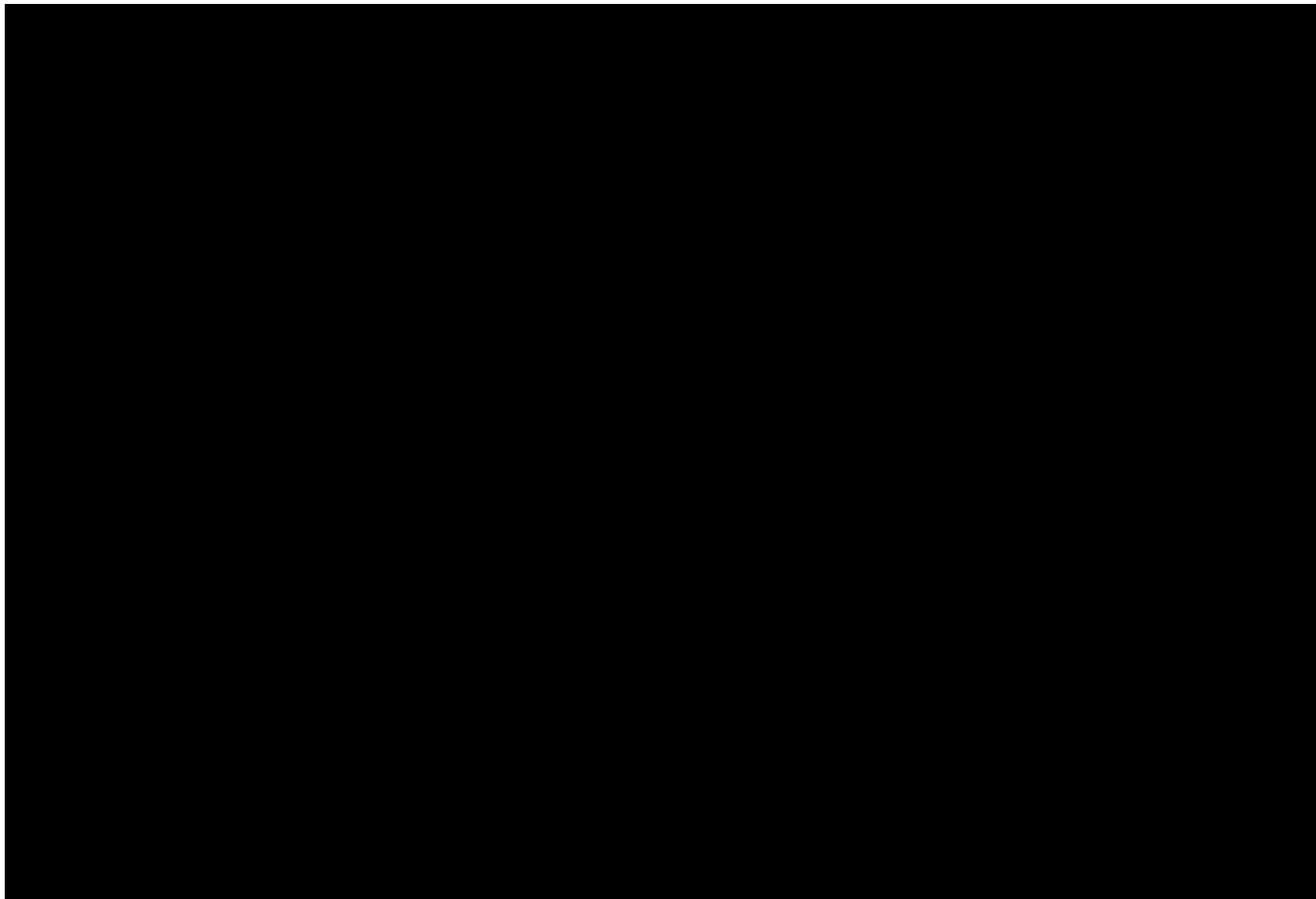
“. . . If they leave trash there, they'll do it anywhere . . . trash can bring anything from roaches to rats to crime.”

. . . this problem exists because no one says anything about it!”

# Forum II – “Setting NPU-V Priorities”

## August 22, 2006





# What Did NPU-V Specific Data Reveal?

Data Sources	Findings
Neighborhoods Count & GIS health status maps	<b>Positive family, community assets</b> - high rates of health, economic, and environmental disparities
Listening Sessions (5 NPU-V Neighborhoods)	<b>Aware of disparities</b> , limited awareness of health/ social resources; access to care, depression/mental health a problem.
“Photovoice”	Community (homes, buildings, roads) in disarray. Environmental potential great but not realized
Perception Analyzer (Moment-to-moment)	Youth (middle school and teens) need support – crime and neighborhood cleanliness a problem.
Ethnography	<b>CBOs (strong asset)</b> could be more effective if they collaborated – some movement in that direction detected
SMC Medical Records	Top diagnoses (2004 -2005) included selected chronic diseases, oral and visual health
Grady EMS/ED Records	NPU-V residents disproportionately use 911(EMS/ED) services for non-emergency health care

## NPU-V Resident Ballot – Select 2 from each column

### Health Problems

- ☐ Hypertension
- ☒ Diabetes
- ☐ Asthma
- ☒ Depression/mental health
- ☒ Heart Disease
- ☐ Early detection of cancer
- ☐ Upper respiratory infections
- ☐ Sanitation
- ☒ HIV/AIDS
- ☒ Drug/alcohol abuse
- ☐ Childhood diseases/vaccination
- ☐ Pregnancy (prenatal/postnatal care)

### Social Determinants of Health

- ☒ Crime/safety
- ☐ Lack of grocery stores
- ☐ Neighborhood cleanliness
- ☐ Decline in businesses
- ☐ Parks and green space
- ☒ Unaffordable housing/ Vacant housing
- ☒ Lack of employment
- ☒ Youth support and development
- ☐ Racism
- ☐ Access to health services
- ☒ Lack of health knowledge

### Criteria to consider in making your judgment:

- Do you perceive it to be of *highest importance*? Is this problem or issue *changeable*?
- Can you point to *evidence* to support this as a priority?

# *NPU-V Residents: “Our Priority Issues”*

**Mental Health, Depression**

```
graph TD; A([Mental Health, Depression]) -.- B[Chronic Diseases]; A -.- C[Alcohol/Substance Abuse]; A -.- D[Vision, Teeth]; A -.- E[Support for Youth]; A -.- F[Hypertension]; A -.- G[Unsafe, Deteriorating Neighborhoods]; A -.- H[Crime]; A -.- I[Unemployment (& problems of re-entry)]
```

**Chronic Diseases**

**Alcohol/Substance Abuse**

**Vision, Teeth**

**Support for Youth**

**Hypertension**

**Unsafe, Deteriorating  
Neighborhoods**

**Crime**

**Unemployment**  
(& problems of re-entry)

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Where is Mental Health/Depression???

Health Disparity Priority	Intervention Components	Outcomes
<b>Mental Health &amp; Built Environment</b> <i><b>“Dirty Truth Campaign”</b></i>	Photovoice training; Photovoice implementation; compile data bases to support photos; draft concrete policy options through the strategic use of advocacy; engage secondary stakeholders.	Increase policy action aimed at environmental improvement (e.g., safe environment, affordable housing) & promote positive feelings (reduce depression)
<b>Mental Health Services</b> <i><b>“Access to MH Care”</b></i>	Enhanced MH assessment process and access to MH services both internal and external to CBWW. Promote the use of these services through a positive, non-stigmatizing MH communications program tailored to the needs and interests of NPU-V residents.	Increase use of MH services; reduce symptoms (depression scale) that make up the client's Dx
<b>Unemployment and Depression</b> <i><b>“Walking Against Crime”*</b></i>	Planned NPU-V tours/walks (grounded in the principles of “appreciative inquiry”) that enable <i>high risk youth</i> and “re-entry” candidates to connect with community members and, through that re-connection, gain support for access to resources designed to provide re-entry, rehabilitation and employment opportunities.	Increase in employment opportunities for <i>high-risk youth</i> and re-entry candidates, increase NPU-V collective efficacy and reduce situational depression

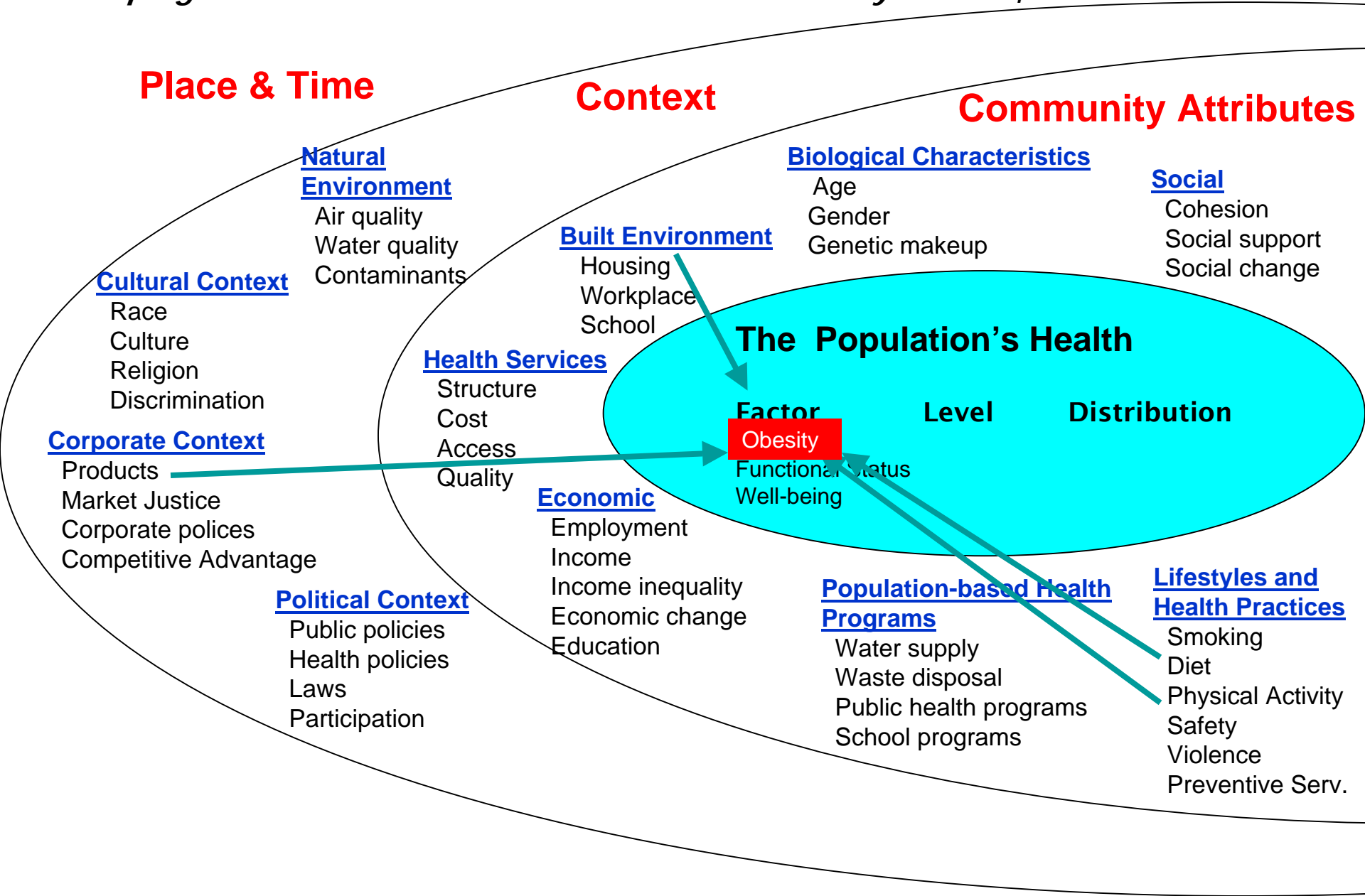
*\*Unemployment and community deprivation are documented drivers of crime; crime is linked to homelessness, poor health, and substance abuse.*

# ***A CONCEPTUAL SUMMARY***

***Based on an National Center  
for Health Statistics  
Perspective***

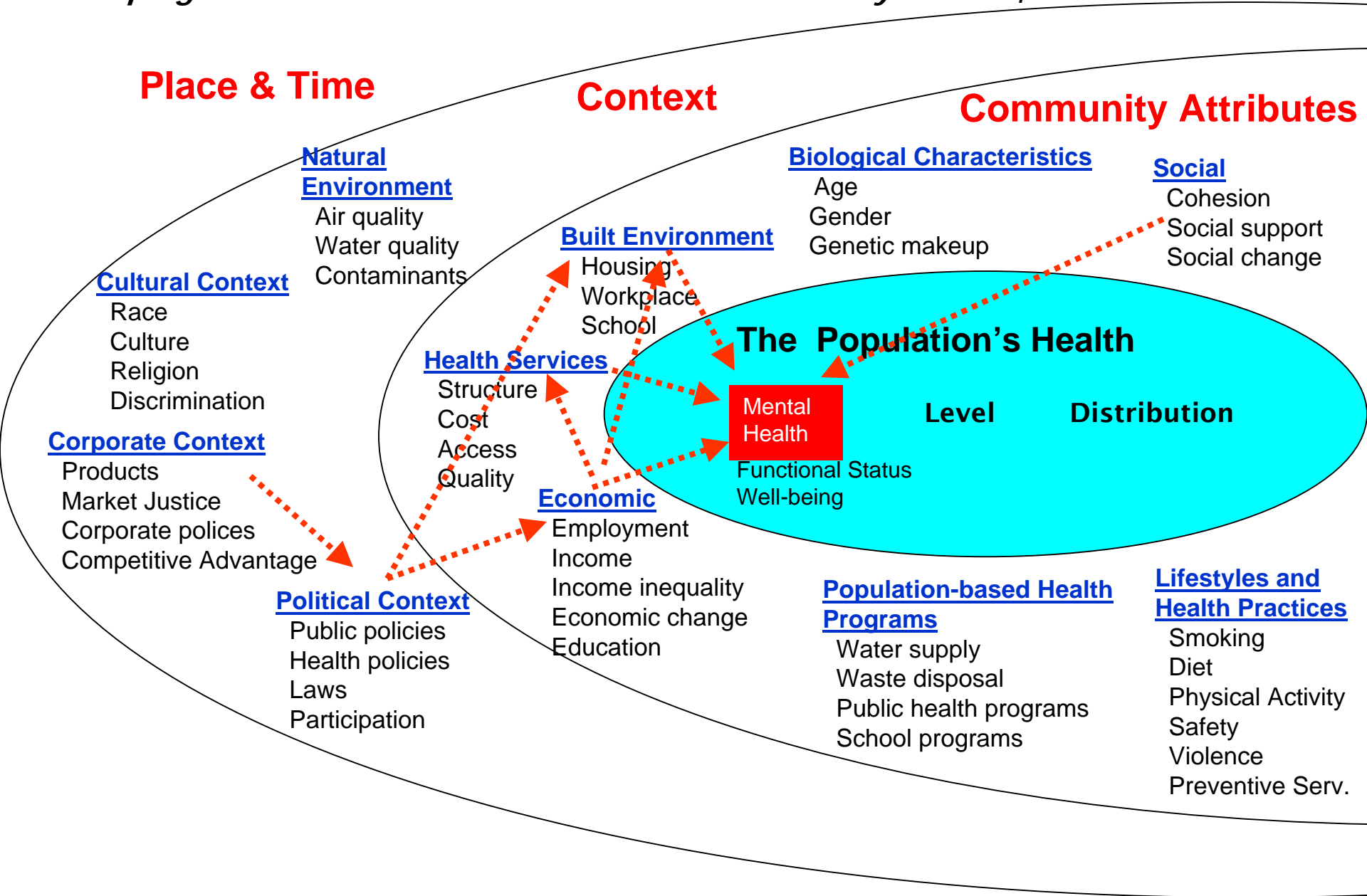
# Influences on the population's health: The View of NCHS

*Shaping a Health Statistics Vision for the 21<sup>st</sup> Century – NCHS, 2002*



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"Framing" of Mock Article	Three Study Groups		
	Impact	Disparity	Progress
Mortality Data	...colon cancer claims the lives of more Black men and women in the U.S. than all lung and expected Black men will die this year alone.	...death rates from colon cancer among Blacks are nearly 50% higher than among Whites. The gap is widening.	...colon cancer death rates for Blacks have dropped 14% in the past 20 years.
Headline	Colon cancer striking Blacks at high rate	Black-White gap in colon cancer deaths growing	Blacks making great strides against colon cancer
Quote from Resident	"Our community faces problems every day and clearly this is a major problem. We need to work together to find ways to get more of us screened for colon cancer."	"It's hard to believe we're worse off than we were 20 years ago. Maybe I shouldn't be surprised. With all the problems Blacks face, it makes sense we'd have higher rates of this disease, too."	"This is great news for us. Despite the problems we face every day, the Black community is doing what it takes to improve our health."

Higher intention to act (screened)  
Lower levels of medical mistrust

**From:** Nicholson RA, Kreuter MW et al., "Unintended effects of emphasizing disparities in cancer communication to African Americans," *Journal of Cancer Epidemiology, Prevention and Biomarkers* (in Press)